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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* HYUN-SOOK KANG and KYUNG-HUN JANG

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Appeal 2007-3531  
Application 09/915,766  
Technology Center 2600

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Decided: March 5, 2008

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Before MAHSHID D. SAADAT, ROBERT E. NAPPI,  
and SCOTT R. BOALICK, *Administrative Patent Judges*.

SAADAT, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellants appeal under 35 U.S.C. § 134(a) from a Final Rejection of claims 1-10, which are all of the claims pending in this application. We have jurisdiction under 35 U.S.C. § 6(b).

Appellants invented a method and apparatus for allocating bandwidth in a wireless Local Area Network (LAN) wherein bandwidth is constantly allocated to a terminal that is intended for a real time data transmission, a Contention Free Period (CFP) is adjusted based on a transmission rate of the terminal, and an occupancy time of the terminal is adjusted by providing a CFP occupancy limit (Spec. 3).

Claim 1, which is representative of the claims on appeal, reads as follows:

1. A method for allocating bandwidth in a wireless Local Area Network having an Access Point and at least one wireless communication terminal, comprising the steps of:

(a) the Access Point allocating a fixed bandwidth to said at least one wireless communication terminal;

(b) receiving a transmission rate corresponding to a desired Contention Free Period of data to be transceived from said at least one wireless communication terminal; and

(c) adjusting a rate of Contention Free Period occupancy of said at least one wireless communication terminal in the fixed bandwidth, based on the received transmission rate.

The prior art references relied upon by the Examiner in rejecting the claims on appeal are:

Bauchot	US 5,970,062	Oct. 19, 1999
Montpetit	US 6,366,761 B1	Apr. 2, 2002
		(filed Oct. 6, 1998)
Kalliokulju	US 6,553,006 B1	Apr. 22, 2003

(filed Aug. 9, 1999)

Claims 1, 5, 6, and 10 stand rejected under 35 U.S.C. § 102(e) as anticipated by Bauchot.<sup>1</sup>

Claims 2, 4, 7, and 9 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Bauchot and Kalliokulju.

Claims 3 and 8 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Bauchot, Kalliokulju, and Montpetit.

We reverse.

## ISSUE

The issue is whether the Examiner erred in rejecting the claims under 35 U.S.C. §§ 102(e) and 103(a). The issue specifically turns on whether Bauchot anticipates Appellants' claimed invention by disclosing "receiving a transmission rate corresponding to a desired Contention Free Period" and "adjusting a rate of Contention Free Period occupancy ..., based on the received transmission rate," as recited in claim 1.

## PRINCIPLES OF LAW

### *1. Anticipation*

A rejection for anticipation requires that the four corners of a single prior art document describe every element of the claimed invention, either expressly or inherently, such that a person of ordinary skill in the art could

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<sup>1</sup> The Examiner relies on Fichou, US 5,909,443, Jun. 1, 1999, to support the inherency of the transmission rate in Bauchot (Ans. 4).

practice the invention without undue experimentation. *See Atlas Powder Co. v. IRECO, Inc.*, 190 F.3d 1342, 1347 (Fed. Cir. 1999); *In re Paulsen*, 30 F.3d 1475, 1478-79 (Fed. Cir. 1994).

## 2. *Inherency*

“Under the doctrine of inherency, if an element is not expressly disclosed in a prior art reference, the reference will still be deemed to anticipate a subsequent claim if the missing element ‘is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill.’” *Rosco, Inc. v. Mirror Lite Co.*, 304 F.3d 1373, 1380 (Fed. Cir. 2002) (quoting *Cont'l Can Co. v. Monsanto Co.*, 948 F.2d 1264, 1268 (Fed. Cir. 1991)). “Inherent anticipation requires that the missing descriptive material is ‘necessarily present,’ not merely probably or possibly present, in the prior art.” *Trintec Indus., Inc. v. Top-U.S.A. Corp.*, 295 F.3d 1292, 1295 (Fed. Cir. 2002) (quoting *In re Robertson*, 169 F.3d 743, 745 (Fed. Cir. 1999)). *See also In re Cruciferous Sprout Litig.*, 301 F.3d 1343, 1349 (Fed. Cir. 2002) and *In re King*, 801 F.2d 1324, 1326 (Fed. Cir. 1986) (“Under the principles of inherency, if the prior art necessarily functions in accordance with, or includes, the claimed limitations, it anticipates”).

## ANALYSIS

Appellants contend that Bauchot does not expressly or inherently disclose the claimed feature of “receiving a transmission rate corresponding to a desired Contention Free Period” (App. Br. 8). Appellants argue that:

Assuming, *arguendo*, that Bauchot teaches transmitting bandwidth reservation requests for an UP\_RESERVED period (or Contention Free Period), -such transmission of bandwidth reservation request does not necessarily involve the receipt of a transmission rate corresponding to a desired contention free period of data. A reservation request, as set forth in Bauchot, could involve simply requesting a reservation without the transmission of a transmission rate. Therefore, even though bandwidth relates to transmission rate or baud rate, a transmission of a bandwidth reservation request does not inherently teach or suggest receiving a transmission rate corresponding to a desired contention free period of data, as set forth in claim 1.

(App. Br. 8-9).

Appellants further argue that adjusting a rate of Contention Free Period occupancy based on the received transmission rate is not taught by Bauchot since nothing in the reference necessarily involves the receipt of a transmission rate (App. Br. 9-10).

The Examiner relies on Appellants' statement that "even though bandwidth relates to transmission rate or baud rate," *supra*, to conclude that Bauchot inherently discloses "receiving a transmission rate" since one of ordinary skill in the art would have recognized that asynchronous transfer mode (ATM) technology must have a transmission rate (Ans. 3). The Examiner states that since Bauchot requests the UP\_RESERVE period, including a transfer rate would be inherent because the UP\_RESERVE

period (i.e., bandwidth) would be allocated to the mobile terminal according to the type of traffic (Ans. 3-4).

Based on a review of Bauchot, we find that the portions of Bauchot relied on by the Examiner, at best, teach bandwidth allocation. E.g., Bauchot; col. 6, ll. 40-49. While Bauchot mentions “transmission rate” as one of the elements for providing service guarantees in ATM connections in cases where transmission media are assumed almost error free (col. 1, ll. 24-32), adjusting a rate of Contention Free Period occupancy based on a received transmission rate, however, is not specified in the reference. Thus, consistent with *Rosco*, the question is not whether requesting the UP\_RESERVE period inherently results in receiving a transmission rate and adjusting the rate of Contention Free Period occupancy, but whether one skilled in the art would read Bauchot as inherently disclosing the claimed invention. There is no evidence in the record to support a finding that one skilled in the art would so read Bauchot.

Additionally, in the Answer, the Examiner relies on Fichou to support the inherency of the transmission rate (Ans. 4-5) and reasons that a request for reservation of additional bandwidth must have a transmission rate that the bandwidth must support according to the quality of service (QOS) traffic parameters of Bauchot (Ans. 5). The Examiner further identifies these QOS traffic parameters to include transmission rate of the contract and transmission rate of the type of traffic (*id.*) and concludes that, as bandwidth relates to transmission rate, the request for additional bandwidth relates to transmission rate (*id.*).

Appellants contend that the Examiner's citing and discussing Fichou amounts to an implicit new ground of rejection (Reply Br. 5).<sup>2</sup> Appellants further assert that the Examiner's conclusion based on the teachings of Bauchot is erroneous since the mobile terminal in Bauchot does not request the reservation of additional bandwidth (Reply Br. 6).

While we disagree with Appellants that citing a new prior art reference in support of inherency is per se impermissible, we do not find that Fichou provides the necessary evidence showing that Bauchot inherently discloses the claimed invention. In fact, the cited portions of Fichou provide for a flow control algorithm for an ATM network using explicit rate cell marking for regulating the transmission rate of network traffic sources (col. 1, ll. 7-11), while the mobile terminals in Bauchot, as pointed out by Appellants (Reply Br. 5), make only reservation requests and not any requests for additional bandwidth (col. 8, ll. 14-20). Therefore, considering the teachings of Bauchot and the numerous inferences in the Examiner's line of reasoning based on Fichou, the skilled artisan would not read Bauchot as inherently disclosing receiving a transmission rate corresponding to a desired Contention Free Period of data merely based on bandwidth allocation. As such, neither a reservation request by mobile terminal, nor an algorithm for bandwidth allocation does provide the missing requirements in Bauchot related to receiving a transmission rate corresponding to a desired

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<sup>2</sup> Appellants have also filed a Request to Reopen Prosecution under 37 C.F.R. § 41.39(b)(1) on November 8, 2005, which was denied by the Examiner as indicated in a communication mailed March 7, 2006.



Contention Free Period of data and adjusting the rate of the Contention Free Period occupancy based on the received transmission rate. Satisfying the initial burden of presenting a prima facie case of anticipation requires more than making conclusory statements that bandwidth requests relate to a transmission rate.

### CONCLUSION

Under the facts we have here and the arguments presented by the Examiner and Appellants as described above, we find that the Examiner has failed to make a prima facie case that Bauchot anticipates claim 1 or independent claim 6, which includes similar limitations. Therefore, in view of our analysis above, the 35 U.S.C. § 102(e) rejection of claims 1, 5, 6, and 10 as anticipated by Bauchot cannot be sustained. Additionally, we do not sustain the 35 U.S.C. § 103 rejection of claims 2, 4, 7, and 9 over Bauchot and Kalliokulju, nor of claims 3 and 8 over Bauchot, Kalliokulju, and Montpetit, as no teaching in these references has been identified to overcome the deficiencies of Bauchot discussed above.

### ORDER

The decision of the Examiner rejecting claims 1-10 is reversed.

REVERSED

Appeal 2007-3531  
Application 09/915,766

tddl/gw

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